

AMENDMENTS TO THE DRAWINGS

The attached replacement sheets of drawings add a PRIOR ART legend to Figs. 1-5.

REMARKS

Reconsideration and allowance are respectfully requested.

Figures 1-5 now include Prior Art legends. Claim 8 is amended to recite that “the series-fed antenna array columns are connectable to and feedable from an active receive/transmit (T/R) module.” Because the active receive/transmit module is not be claimed as part of the antenna, it need not be explicitly shown. Similarly, claim 9 now recites: “wherein only one set of series-fed columns being actively used and another interleaved set of series-fed columns may be terminated by a load forming parasitic columns of the sparse array antenna.” Again, the load is not claimed as part of the antenna. Withdrawal of the drawings objection is requested.

The Examiner makes several objections/lack of clarity rejections to the claim language. Clarifying amendments are made to overcome those objections/rejections. Withdrawal of same is requested.

Claims 1, 2, 6, 8, and 9 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable based on Derneryd in view of Proctor. This rejection is respectfully traversed.

According the Examiner, Derneryd discloses all features of the sparse array antenna in claim 1 except that the receiving array columns operate as parasitic elements in transmit mode and the transmitting array columns operate as parasitic elements in receive mode, thereby reducing creation of grating lobes. The Examiner relies on Proctor for these missing features.

Proctor teaches that some elements are dedicated as active elements and other interleaved elements are dedicated as parasitic elements. But Proctor does not teach that the elements change properties, i.e., change between active and parasitic operation. Proctor’s array antennas with dedicated parasitic elements in combination with active elements (transmit/receive elements) do not disclose or suggest that certain active elements may be used as parasitic

elements in transmit mode and vice versa. In other words, the combination of Derneryd and Proctor does not teach that: "active receiving radiator elements in the receiving array columns operate as parasitic elements in a transmit mode and active transmitting radiator elements in the transmitting array columns operate as parasitic elements in a receive mode, thereby reducing creation of grating lobes."

Claims 1-5 and 7-9 stand rejected under 35 U.S.C. §103 as allegedly being unpatentable based on Falk in view of Proctor. This rejection is respectfully traversed.

The Examiner indicates that Falk lacks that same features from claim 1 at Derneryd and turns similarly to Proctor. But Proctor lacks the claim features from claim 1 as explained above, and so, this rejection must also be withdrawn.

The application is in condition for allowance. An early notice to that effect is requested.

Respectfully submitted,

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By: _____



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